

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the foregoing amendments and the following remarks.

Claims 1 - 8 and 10 - 20 are pending in the application. Claims 1, 10, and 19 have been amended. Claim 9 has been canceled.

Claims 1 -20 are rejected as obvious over the Gozdz publication in view of Gozdz '643 and Gozdz '091. Applicant traverses this rejection.

Among other things, the Examiner has taken the position that the surface density, now recited in independent claims 1 and 19, would be reasonably expected from the Gozdz publication. This, however, is not suggested. As mentioned the Gozdz publication (page 5, last paragraph), Celgard, the Applicant here, and Telcordia were jointly developing the coated separator mentioned in the Gozdz publication. That separator is the one disclosed in USPN 6,322,923 (disclosed as 09/016,024, Spotnitz et al) and has a surface density of $< 0.3 \text{ mg/cm}^2$ (see Gozdz publication, page 6, lines, 2-4, "very thin layer"). Accordingly, the Gozdz publication does not suggest the surface density claimed in the instant claims. That the coatings are made of similar materials does not provide the suggestion.

Furthermore, Gozdz publication teaches that the Celgard membrane with the proprietary coating (SMMPS) were difficult to bond to the electrodes (page 5, 1st paragraph) and, therefore, a new bonding process was needed (page 5, 2nd paragraph). That process is described as wetting the SMMPS with a controlled amount of PC, plasticizer, (page 7, 1st full paragraph). Gozdz '643 is the patent disclosing that process ('643, column 3, lines 25 - 37). Gozdz publication and '643 make no mention of the components of the SMMPS' coating, so how can it suggest the ratio of gel polymer to plasticizer, the copolymer ratio, or the coating's surface density?

Gozdz '091 teaches away from the use of membranes (column 1, lines 36 - 43, and column 2, lines 33 - 39). Accordingly, it cannot suggest "not filling the plurality of mircopores."

First, all the limitations are not taught or suggested. MPEP 2143.03. Gozdz publication and '643 are silent about the ratio of gel polymer to plasticizer, the copolymer ratio, or the coating's surface density; and Gozdz '091 does not mention a membrane. Accordingly, where is the suggestion?

Second, the mere fact that references can be combined is not sufficient. MPEP 2143.01. How can Gozdz publication and '643 be combined with '091? '091 says do not use a membrane, and the other references say use a membrane. One would have to disregard the

teachings of '091 to make the combination and that is improper.
MPEP 2143.01 (citing *In re Gordon*).

Third, no convincing line of reasoning has been presented. In both Gozdz publication and '643, plasticizer is coated over the SMMPS to facilitate bonding. Neither mention the amount of plasticizer to be used in the coating. So, how do they suggest the amount of plasticizer in the coating?

The claimed invention, on the other hand, recites a battery separator having a membrane and a coating thereon, where the coating does not fill the pores, the ratio of gel polymer to plasticizer is 1:0.5 to 1:3, and has a surface density of 0.4 to 0.9 mg/cm². This is not suggested.

In view of the foregoing amendments and comments, Applicant respectfully requests an early Notice of Allowance in the instant application.

Respectfully submitted,



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